

AMENDMENTS

In the Claims

1. (Currently Amended) A method for providing passive stereo images comprising:

~~converting active stereo video data into passive stereo video data, the active stereo video data containing right channel pixel data and left channel pixel data~~ receiving active stereo video data containing right channel pixel data and left channel pixel data corresponding to an image to be rendered, the active stereo video data being configured to enable alternate output of corresponding frames of the right channel pixel data and the left channel pixel data for displaying an image to be rendered in active stereo, ~~said method comprising the steps of:~~

~~receiving~~ converting the active stereo video data into passive stereo video data containing the right channel pixel data and the left channel pixel data corresponding to the image to be rendered;

~~re-sequencing the right channel pixel data and the left channel pixel data; and~~

~~simultaneously outputting corresponding frames of the right channel pixel data and the left channel pixel data for displaying the image to be rendered in passive stereo~~ using the passive stereo video data.

2. (Currently Amended) The method of claim 1, ~~wherein a frame rate of the pixel data simultaneously output for displaying the image to be rendered in passive stereo~~ comprises displaying the image to be rendered at a frame rate that is approximately one half of a frame rate of the pixel data of the active stereo video data.

3. (Currently Amended) The method of claim 1, wherein ~~the step of~~ receiving the active stereo video data comprises ~~the step of~~ receiving the active stereo video data from multiple digital video data streams, each of the multiple digital video data streams being provided by a graphics pipeline, each graphics pipeline being configured to process pixel data corresponding to at least a portion of the image to be rendered.

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4. (Currently Amended) The method of claim 1, further comprising ~~the step of~~ providing a first left channel frame buffer, a second left channel frame buffer, a first right channel frame buffer, and a second right channel frame buffer; and wherein ~~the step of re-sequencing the right channel pixel data and the left channel pixel data comprises the step of~~ converting the active stereo video data into passive stereo video data comprises allocating the right channel pixel data and the left channel pixel data to the first left channel frame buffer, the second left channel frame buffer, the first right channel frame buffer, and the second right channel frame buffer.

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5. (Currently Amended) The method of claim 1, wherein ~~the step of simultaneously outputting corresponding frames comprises the steps of~~ converting the active stereo video data into passive stereo video data comprises:

buffering a first frame of the right channel pixel data;
buffering a first frame of the left channel pixel data;
simultaneously providing the first frame of the right channel pixel data and the first frame of the left channel pixel data for displaying the image to be rendered;
determining whether a second frame of the right channel pixel data and a second frame of left channel pixel data are ready for simultaneously providing; and

if the second frame of the right channel pixel data and the second frame of left channel pixel data are not ready for simultaneously providing, again simultaneously providing the first frame of the right channel pixel data and the first frame of the left channel pixel data.

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(Currently Amended) The method of claim 3, wherein: ~~the step of~~ receiving the active stereo video data from multiple digital video data streams comprises ~~the steps of:~~

receiving a first of the multiple digital video data streams containing three-dimensional pixel data corresponding to the image to be rendered; and receiving a second of the multiple digital video data streams containing two-dimensional pixel data corresponding to the image to be rendered; and

31 wherein ~~the step of re-sequencing the right channel pixel data and the left channel pixel data~~ converting the active stereo video data into passive stereo video data comprises the ~~step of:~~ combining the two-dimensional pixel data and the three-dimensional pixel data.

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7.

(Currently Amended) The method of claim ~~[[3]]~~ 4, wherein ~~the step of~~ combining the two-dimensional pixel data and the three-dimensional pixel data comprises ~~the step of:~~ replacing at least a portion of the pixel data provided by the second of the multiple digital video data streams with at least a portion of the pixel data provided by the first of the multiple digital video data streams.

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(Currently Amended) The method of claim ~~[[3]]~~ 6, wherein ~~the step of~~ allocating the right channel pixel data and the left channel pixel data comprises ~~the step of:~~ utilizing chroma-key values for allocating the right channel pixel data and the left channel pixel data.

8/9. (Currently Amended) The method of claim ⁶4, wherein ~~the step of~~ allocating the right channel pixel data and the left channel pixel data comprises ~~the step of~~ utilizing overscanned information contained in the active stereo video data for allocating the right channel pixel data and the left channel pixel data.

9/10. (Currently Amended) The method of claim ⁸9, wherein ~~the step of~~ utilizing overscanned information comprises ~~the step of~~ utilizing overscanned information contained in the active stereo video data for allocating the right channel pixel data to one of various right channel buffers, and the left channel pixel data to one of various left channel buffers.

11/11. (Currently Amended) A device for providing passive stereo images comprising:

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means for receiving active stereo video data containing right channel pixel data and left channel pixel data corresponding to an image to be rendered ~~converting active stereo video data into passive stereo video data, the active stereo video data containing right channel pixel data and left channel pixel data, the active stereo video data being configured to enable alternate output of corresponding frames of the right channel pixel data and the left channel pixel data for displaying an image to be rendered in active stereo; and~~ said device comprising:

~~means for receiving the active stereo video data containing the right channel pixel data and the left channel pixel data corresponding to the image to be rendered;~~

~~means for re-sequencing the right channel pixel data and the left channel pixel data;~~
and

~~means for simultaneously outputting corresponding frames of the right channel pixel data and the left channel pixel data~~

means for converting the active stereo video data into passive stereo video data.

12. (Currently Amended) The device of claim 11, wherein a frame rate of the pixel data ~~simultaneously output~~ for displaying the image to be rendered in passive stereo is approximately one half of a frame rate of the pixel data of the active stereo video data.

13. (Original) The device of claim 11, further comprising:

~~a first means for frame buffering the left channel pixel data frame buffer;~~

~~a second left channel frame buffer;~~

~~a first means for frame buffering the right channel pixel data frame buffer;~~

~~a second right channel frame buffer; and~~

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means for allocating the right channel pixel data and the left channel pixel data to said ~~first means for frame buffering the left channel pixel data frame buffer, said second left channel frame buffer, said first right channel frame buffer, and said second~~ means for frame buffering the right channel frame buffer.

14. (Original) The device of claim 11, further comprising:

means for determining whether a second frame of the right channel pixel data and a second frame of left channel pixel data are ready for simultaneously providing; and

means for simultaneously re-providing a first frame of the right channel pixel data and a first frame of the left channel pixel data if the second frame of the right channel pixel data and the second frame of left channel pixel data are not ready for simultaneously providing.

16/15. (Currently Amended) A device for providing passive stereo images
comprising:

logic configured to convert active stereo video data into passive stereo video data, the active stereo video data containing right channel pixel data and left channel pixel data, the active stereo video data being configured to enable alternate output of corresponding frames of the right channel pixel data and the left channel pixel data for displaying an image to be rendered in active stereo, ~~said device comprising:~~

~~logic configured to receive the active stereo video data containing the right channel pixel data and the left channel pixel data corresponding to the image to be rendered;~~

~~logic configured to re-sequence the right channel pixel data and the left channel pixel data; and~~

~~logic configured to simultaneously output corresponding frames of the right channel pixel data and the left channel pixel data for displaying the image to be rendered in passive stereo.~~

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16. (Original) The device of claim 15, further comprising:

logic configured to determine whether a second frame of the right channel pixel data and a second frame of left channel pixel data are ready for simultaneously providing; and

logic configured to simultaneously re-provide a first frame of the right channel pixel data and a first frame of the left channel pixel data if the second frame of the right channel pixel data and the second frame of left channel pixel data are not ready for simultaneously providing.

17. – 19. (Canceled).

1520. (New) The device of claim 11, further comprising means for displaying the image to be rendered in passive stereo.

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21. (New) A device for providing passive stereo images comprising:
a graphics processor operative to convert active stereo video data into a passive stereo video data, said graphics processor comprising:

an input mechanism configured to receive the active stereo video data, the active stereo video data containing right channel pixel data and left channel pixel data, the active stereo video data being configured to enable alternate output of corresponding frames of the right channel pixel data and the left channel pixel data for displaying an image to be rendered in active stereo, the active stereo video data being provided as multiple digital video data streams containing the right channel pixel data and the left channel pixel data; and

an output mechanism electrically communicating with said input mechanism, said output mechanism being configured to receive the right channel pixel data and the left channel pixel data and selectively provide the pixel data as a passive stereo video data stream.

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22. (New) The device of claim 21, wherein said input mechanism is configured to provide a frame of data corresponding to the image to be rendered, and insert pixel data from the multiple digital video data streams into said frame of data such that, in response to receiving a first of the multiple digital video data streams, said input mechanism provides said frame of data and inserts the pixel data from the first of the multiple digital video data streams into a corresponding portion of said frame of data.

¹⁸
~~20/23~~. (New) The device of claim ~~21~~¹⁸, wherein said output mechanism has a first left channel frame buffer, a second left channel frame buffer, a first right channel frame buffer, and a second right channel frame buffer, said output mechanism being selectively configured to provide said passive stereo video data stream by receiving pixel data from said input mechanism, allocating said pixel data to said first left channel frame buffer, said second left channel frame buffer, said first right channel frame buffer, and said second right channel frame buffer, and simultaneously outputting pixel data from one of said left channel frame buffers and one of said right channel frame buffers.

¹⁸
~~21~~²⁴. (New) The device of claim ~~21~~¹⁸, wherein said output mechanism is further configured to selectively provide the pixel data as an active stereo video data stream.
